PADUCAH
Remediation Services
A Portage Shaw Joint Venture Company

761 Veterans Ave
Kevil, KY 42053

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March 25, 2008

WSD-L-0335

Mr. William E. Murphie, Manager
Portsmouth/Paducah Project Office
U.S. Department of Energy
1017 Majestic Drive, Suite 200
Lexington, Kentucky 40513

Dear Mr. Murphie:

DE-AC30-06EW05001 – DELIVERABLE NUMBER 175 – *THE SITE TREATMENT PLAN ANNUAL UPDATE FOR THE UNITED STATES DEPARTMENT OF ENERGY PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY*, PRS-WSD-0278

Enclosed is the subject report and suggested text for use in submitting this report to Kentucky Division of Waste Management. This report is required by the Federal Facilities Compliance Act/Agreed Order issued by the Kentucky Division of Waste Management on September 10, 1997.

If you have any questions or require additional information, please contact Greg Shaia at (270) 441-5223.

Sincerely,

Russell Boyd

Russell Boyd, P.E., Site Manager
Paducah Remediation Services, LLC

RB:GLS:bar

Enclosures:
1. Annual Site Treatment Plan Report
2. Suggested transmittal letter

In accordance with the requirements of Contract DE-AC30-06EW05001 and as acknowledged by the above signature, I hereby certify that the information provided in this transmittal has been prepared in accordance with all applicable requirements and the information is, to the best of my knowledge and belief, true, accurate, and complete.

/

cc w/enclosures:
D. Ashburn
R. Blumenfeld, PPPO/Lexington
R. Knerr, PPPO/Paducah
M. LaBarge
M. Redfield
G. Shaia
File-DCC/DMC-RC

cc w/o enclosures:
P. Coutts

e-copy:
brenda.jones@prs-llc.net
debbie.mckenna@lex.doe.gov
denny.morehead@prs-llc.net
donna.perry@prs-llc.net
haselwoodsupport@aol.com
john.morgan@prs-llc.net
marjorie.dulatt@lex.doe.gov
mspry@portageenv.com
myrna.redfield@prs-llc.net
nstanisich@portageenv.com
reinhard.knerr@lex.doe.gov
sally.cooper@prs-llc.net
steve.manning@prs-llc.net

Mr. Anthony P. Hatton, PG, Assistant Director
Division of Waste Management
Kentucky Department for Environmental Protection
14 Reilly Road
Frankfort Office Park
Frankfort, Kentucky 40601

PPPO-02-XXX-XX

Dear Mr. Hatton:

SUBMITTAL OF *THE SITE TREATMENT PLAN ANNUAL UPDATE FOR THE UNITED STATES DEPARTMENT OF ENERGY, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY*, PRS-WSD-0278

Enclosed is *The Site Treatment Plan Annual Update for the United States Department of Energy, Paducah Gaseous Diffusion Plant, Paducah, Kentucky*, PRS-WSD-0278. This update is required by the Agreed Order of September 10, 1997 (File No. DWM-30039-042).

[The U.S. Department of Energy to insert text concerning Tables 7.1, 7.2, 7.3, and 8 extension.]

If you have any questions or require additional information, please call Reinhard Knerr at (270) 441-6825.

Sincerely,

William E. Murphie
Manager
Portsmouth/Paducah Project Office

Enclosure

cc w/enclosure:
H. Taylor, EPA/Atlanta

cc w/o enclosure:
AR/Kevil
R. Boyd, PRS/Kevil
DCC/Kevil
P. Gagnon, PRS/Kevil
J. Morgan, PRS/Kevil
M. Redfield, PRS/Kevil
G. Shaia, PRS/Kevil
J. Tufts, EPA/Atlanta

The Site Treatment Plan Annual Update for the United States Department of Energy, Paducah Gaseous Diffusion Plant, Paducah, Kentucky

This document is approved for public release per review by:

M Brannon 3.25.08

PGDP Classification & Information Control Office Date
Swift and Staley Team

PRS-WSD-0278

The Site Treatment Plan Annual Update for the United States Department of Energy, Paducah Gaseous Diffusion Plant, Paducah, Kentucky

Date Issued—March 2008

Prepared for the
U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
PADUCAH REMEDIATION SERVICES, LLC
managing the
Environmental Remediation Activities at the
Paducah Gaseous Diffusion Plant
under contract DE-AC30-06W05001

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CONTENTS

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ACRONYMS

Cabinet	Kentucky Environmental and Public Protection Cabinet
CY	calendar year
DOE	U.S. Department of Energy
kg	kilogram
m^3	cubic meters
MLLW	mixed low-level waste
MTRU	mixed transuranic
PGDP	Paducah Gaseous Diffusion Plant
SAP	Sampling and Analysis Plan
STP	Site Treatment Plan
TCLP	Toxicity Characteristics Leaching Procedure
TDEC	Tennessee Department of Environment and Conservation
TRU	transuranic
TSCA	Toxic Substances Control Act
TSCAI	TSCA Incinerator
WAC	waste acceptance criteria
WIPP	Waste Isolation Pilot Plant

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EXECUTIVE SUMMARY

Agreed Order DWM-30039-042 between the U.S. Department of Energy (DOE)/Paducah Gaseous Diffusion Plant (PGDP) and the Kentucky Environmental and Public Protection Cabinet became effective September 10, 1997. This Site Treatment Plan (STP) Annual Update is a requirement of the Agreed Order.

During the reporting period from January 1 to December 31, 2007, DOE/PGDP continued characterization of waste to support STP compliance dates, shipment of mixed low-level waste (MLLW) to the Toxic Substances Control Act (TSCA) Incinerator and commercial facilities, on-site treatment of MLLW and evaluation of waste streams in pursuit of appropriate treatment options. The amount of MLLW stored on-site and listed in the STP during calendar year 2007 was reduced by the activities summarized in Table E1.

Table E1. Summary of Waste Proposed for Removal from STP

STP Table	Kilogram (kg)	Cubic meters (m^3)	Justification for Removal
2	4,643.01	5.08	Waste was shipped to TSCA Incinerator for treatment
3.1	31.75	0.32	Waste was found to be nonhazardous
3.2	710.78	1.69	Waste was shipped to Energy*Solutions* or PermaFix facilities for treatment
7.1	7,259.23	9.21	Waste was shipped to Energy*Solutions* for treatment, or found to be nonhazardous
7.2	22,528.55	24.66	Waste was treated on-site, shipped to TSCA Incinerator or Energy*Solutions* for treatment, or was found to be nonhazardous or compliant with land disposal restrictions
7.3	24,043.28	45.04	Waste was treated on-site, shipped to TSCA Incinerator or Energy*Solutions* for treatment, was found to be nonhazardous; or was reused on-site
8	4,958.04	9.15	Waste was shipped to TSCA Incinerator or Energy*Solutions* for treatment, or was found to be nonhazardous

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1. INTRODUCTION

Agreed Order DWM-30039-042 between the U.S. Department of Energy (DOE)/Paducah Gaseous Diffusion Plant (PGDP) and the Kentucky Environmental and Public Protection Cabinet (hereafter "the Cabinet") became effective September 10, 1997. This Site Treatment Plan (STP) Annual Update is a requirement of the Agreed Order.

The purpose of the Annual Report is to update the STP to include all approved amendments and revisions made during the reporting year, to update the tables of DOE/PGDP mixed low-level waste (MLLW), to propose new amendments and revisions, and to summarize the work conducted in implementing the approved STP during the previous year. This update incorporates the proposed compliance date for Table 8 waste consistent with the modification submitted by DOE/PGDP with the Table 8 treatment plan to the Cabinet in June 2006 (see Section 4). This modification requires Cabinet approval as an amendment or revision.

DOE/PGDP currently (based on December 31, 2007, inventory) stores approximately 122 cubic meters (m^3) of MLLW subject to the STP, as listed in Table 1 in Appendix A of this STP Annual Update.

The STP Annual Report is included in Appendix B of this STP update. This STP Annual Report describes the actions that DOE has taken during calendar year (CY) 2007 to implement the requirements of the approved STP.

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2. MIXED LOW-LEVEL WASTE

Treatment of MLLW is implemented in accordance with the standards specified in land disposal restrictions "Treatment Standards for Hazardous Waste," as listed in 401 *KAR* § 37:040, Section 1, and 40 *CFR* § 268.40. Technology-based treatment standards and concentration-based treatment standards are specified.

Table 1 in Appendix A lists DOE/PGDP MLLW waste streams and gives available weight and volume information, as of December 31, 2007. The compliance dates for the MLLW generated and stored by DOE/PGDP are specified in Tables 2 through 12 in Appendix A. Compliance dates are those dates by which DOE shall complete the activities identified in the approved STP. In addition, newly generated or newly discovered waste is detailed in Table 13 and deleted waste is detailed in Table 14.

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3. MIXED LOW-LEVEL WASTE STREAMS FOR WHICH TREATMENT TECHNOLOGY EXISTS

This section identifies schedules for treatment of MLLW where treatment technology exists.

3.1 TOXIC SUBSTANCES CONTROL ACT INCINERATOR AND BROAD SPECTRUM THERMAL TREATMENT

3.1.1 Toxic Substances Control Act Incinerator

DOE/PGDP currently is using the Toxic Substance Control Act (TSCA) Incinerator (TSCAI) in Oak Ridge, Tennessee, for treatment of liquid and soft solid MLLW. The process to define and ultimately gain approval for disposition of waste at the TSCAI is depicted in Figure 1. As a result of this process, disposition of waste slated for the TSCAI generally cannot be accomplished within one year of generation. Due to DOE's current funding mechanism associated with the operation of this facility, the TSCAI is the facility of choice for certain target waste streams.

3.1.1.1 Liquids

On October 23, 1997, DOE/PGDP completed its last shipment of the liquid legacy wastes included in the original STP Table 2 that met the waste acceptance criteria (WAC) for the TSCAI. As such, DOE/PGDP met its original compliance milestone for Table 2 waste. The 10.10 m^3 of waste listed in Table 2 of Appendix A in inventory, as of December 31, 2007, has been added since completion of the original milestone. Liquid wastes sent to the TSCAI are transported by tanker truck. This necessitates accumulating sufficient volume, performing sampling in accordance with the TSCAI WAC, and sending the liquids in batch shipments (i.e., individual storage containers are batched into a tanker for shipment).

Of the waste listed in Table 2 of the 2006 STP Annual Update, 5.08 m^3 was shipped to the TSCAI in CY 2007.

The current status of TSCA liquid waste streams defined in Table 2 of Appendix A, is as follows:

- All of the waste listed is included in the currently approved TSCAI burn plan.
- A proposed shipment designated TSCAI L 07-01 includes the 10.10 m^3 of Table 2 waste. A Sampling and Analysis Plan (SAP) for this shipment is forecast for submittal to the TSCAI during the first quarter of CY 2008.

3.1.1.2 Soft solids

Table 3.1 of Appendix A lists 31.45 m^3 of soft solids waste remaining on-site, as of December 31, 2007, designated for treatment at the TSCAI.

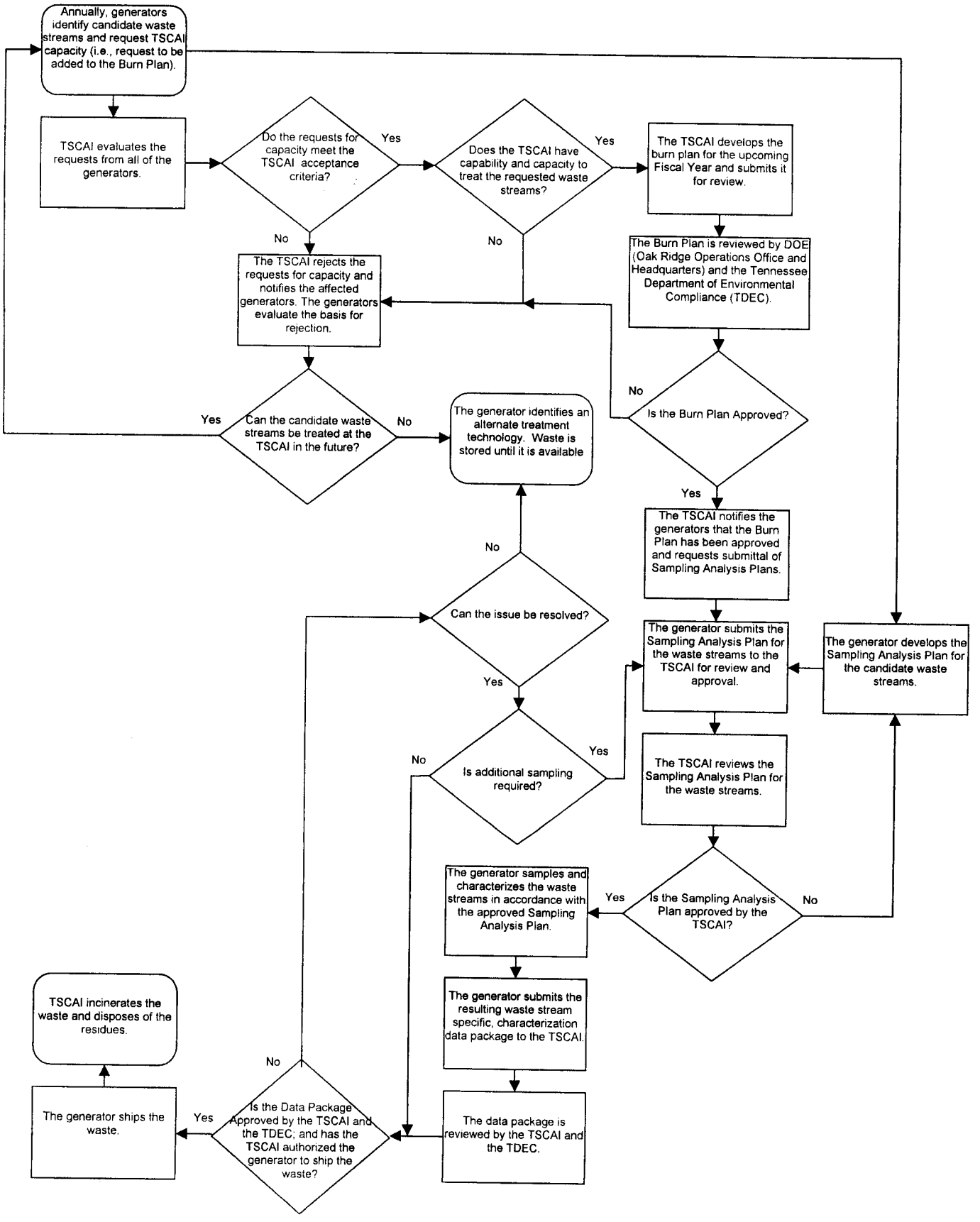

Figure 1. TSCAI Disposition Process

Of the waste listed in Table 3.1 of the 2006 STP Annual Update, 0.32 m^3 was determined to be nonhazardous during CY 2007.

The 31.45 m^3 of waste remaining on Table 3.1 was included in a proposed shipment designated TSCAI S 02-01. The TSCAI requested that this waste be removed due to concerns that metals concentrations would adversely impact the incinerator's ability to meet emissions standards during treatment. DOE/PGDP is evaluating this rejected volume of waste to determine alternate treatment venues. Of this volume, 23.06 m^3 is forecast for shipment to Energy*Solutions* during the first quarter of CY 2008.

DOE/PGDP continues to seek alternate treatment options for remaining waste previously destined for the TSCAI.

3.1.1.3 Treatment residues

The Tennessee Department of Environment and Conservation (TDEC) has agreed that all treatment residues from DOE/PGDP liquid and soft solid waste streams can remain in storage at the Oak Ridge Reservation pending shipment to a disposal facility. Residuals Management Contingency Plans are in place such that the TSCA Incinerator can return treatment residues to DOE/PGDP in the event that residues cannot be shipped directly to final disposal.

3.1.1.4 Compliance dates

3.1.1.4.1 Liquids

DOE/PGDP will submit candidate waste streams with associated the SAP annually to the TSCAI for all Table 2 waste not treated under the previous year's burn plan. Within 90 days following DOE/PGDP receipt of notice that the TSCAI has approved the SAP, DOE/PGDP will submit the data package for the waste to the TSCAI. Within one year following DOE/PGDP receipt of notice that the TSCAI and TDEC have approved the data package and that the TSCAI has authorized shipment of the waste, DOE/PGDP will complete shipment of the approved waste to the TSCAI.

3.1.1.4.2 Soft solids

DOE/PGDP will submit candidate waste streams with associated SAPs annually to the TSCAI for all Table 3.1 waste not treated under the previous year's burn plan. Within 120 days following DOE/PGDP receipt of notice that the TSCAI has approved the SAP, DOE/PGDP will submit the data package for the waste to the TSCAI. Within one year following DOE/PGDP receipt of notice that the TSCAI and TDEC have approved the data package and that the TSCAI has authorized shipment of the waste, DOE/PGDP will complete shipment of the approved waste to the TSCAI.

3.1.2 Broad Spectrum Thermal Treatment

Table 3.2 of Appendix A lists 0.00 m^3 of MLLW no solids remaining on-site as of December 31, 2007, designated for treatment under the Broad Spectrum Treatment Contract.

A total of 1.69 m^3 of Table 3.2 waste was shipped to Energy*Solutions* or Perma-Fix facilities prior to April 1, 2007, completing the compliance milestone for Table 3.2 waste with high special nuclear material content. DOE/PGDP submitted a letter to the Cabinet documenting completion of this compliance milestone.[1]

[1] Letter number PPPO-02-419-07 from Mr. William E. Murphie, DOE, to Mr. R. Bruce Scott, KDEP, "Site Treatment Plan Table 3.2 Milestone Completion," dated April 25, 2007

3.1.2.1 Compliance dates

No further compliance action is required since Table 3.2 waste streams have been depleted.

3.2 C-400-D LIME PRECIPITATION UNIT

This treatment unit was removed from the DOE/PGDP Resources Conservation and Recovery Act permit and is no longer a viable option for treating DOE/PGDP waste. Wastes that were not treated prior to the unit being removed from the permit were moved to other tables within the STP with appropriate treatment options. As a result, Table 4 now is empty, no further compliance action is required.

3.3 COMMERCIAL TREATMENT OF WASTE

No further compliance action is required since Table 5 waste streams have been depleted.

3.4 CYANIDE TREATMENT FACILITY AT OAK RIDGE RESERVATION

No further compliance action is required since Table 6 waste streams have been depleted.

3.5 COMMERCIAL STABILIZATION

Tables 7.1 and 7.2 of Appendix A list 25.34 m^3 and 11.98 m^3 of waste, respectively, remaining on-site as of December 31, 2007, destined for treatment at a commercial stabilization facility. Table 7.1 represents legacy waste identified in the original STP inventory. Table 7.2 represents wastes added to the STP since 1996. Table 7.3 of Appendix A lists 20.79 m^3 of waste remaining on-site as of December 31, 2007, destined for macroencapsulation treatment.

The following quantities of waste from these tables, as listed in the 2006 STP Annual Update, were treated on-site, shipped to TSCAI or Energy*Solutions* for treatment, found to be nonhazardous, found to be compliant with land disposal restrictions, reused on-site, or transferred to Table 12 of Appendix A due to being determined to be transuranic (TRU) during CY 2007:

- 9.21 m^3 of waste listed in Table 7.1
- 24.66 m^3 of waste listed in Table 7.2
- 45.05 m^3 of waste listed in Table 7.3

DOE/PGDP will have to down blend a portion of this remaining waste to lower the overall radiological concentration per container to enable shipment.

3.5.1 Compliance dates

DOE/PGDP shall ship to appropriate receiving facilities or otherwise treat all the MLLW listed in Tables 7.1, 7.2, and 7.3 by January 31, 2008. Within 10 days of each compliance date, DOE/PGDP shall send written documentation to the Cabinet that the activities required by the compliance date have been completed.

3.6 ASH RECEIVERS ASH RESIDUE

No further compliance action is required since Table 9 waste streams have been depleted.

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4. MIXED LOW-LEVEL WASTE STREAMS REQUIRING FURTHER CHARACTERIZATION/SORTING

4.1 WASTE STREAMS NEEDING FURTHER CHARACTERIZATION

The characterization of Table 8 waste streams was finished prior to January 31, 2006, completing the compliance milestone for Table 8 waste requiring the characterization. DOE/PGDP submitted a letter to the Cabinet documenting completion of this compliance milestone.[2]

A treatment plan for Table 8 waste streams was developed prior to July 1, 2006, completing the compliance milestone for Table 8 waste requiring a treatment plan. DOE/PGDP submitted a letter to the Cabinet documenting completion of this compliance milestone and submitting the treatment plan.[3]

Table 8 of Appendix A lists 16.18 m^3 of waste remaining on-site, as of December 31, 2007, requiring treatment.

Of the waste listed in Table 8 of the 2006 STP Annual update, 9.15 m^3 was shipped to the TSCAI or Energy*Solutions* for treatment, or waste was found to be nonhazardous during CY 2007.

DOE/PGDP will have to down blend a portion of this remaining waste to lower the overall radiological concentration per container to enable shipment.

4.1.1 Compliance Dates

With the submittal of the Table 8 treatment plan, DOE/PGDP proposed a compliance milestone to complete shipment to off-site treatment facilities by January 31, 2008. This modification requires Cabinet approval as an amendment or revision.

4.2 SURFACE RADIOLOGICAL CHARACTERIZATION

No further compliance action is required since Table 10 waste streams have been depleted.

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[2] Letter number PPPO-02-256-06 from Mr. William E. Murphie, DOE, to Mr. R. Bruce Scott, KDEP, Completion of "Waste Characterization" Compliance Milestone For Paducah Agreed Order DWM-30039-042, Site Treatment Plan, Table 8, dated February 9, 2006

[3] Letter number PPPO-02-434-06 from Mr. William E. Murphie, DOE, to Mr. R. Bruce Scott, KDEP, Completion of "Waste Treatment Plan" Compliance Milestone For Paducah Agreed Order DWM-30039-042, Site Treatment Plan, Table 8, dated June 29, 2006

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5. VITRIFICATION POTENTIALS

Waste streams that were listed in Table 11 have primary treatment options listed in Tables 3 through 10 of Appendix A. These waste streams previously were listed as potential candidates for on-site vitrification. The on-site vitrification treatment option is not being pursued and no further action is being planned.

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6. MIXED TRANSURANIC WASTE

DOE/PGDP intends to continue interim storage of mixed TRU (MTRU) waste, continue preparation of such wastes for shipment to the Waste Isolation Pilot Plant (WIPP) in New Mexico, and then ship and dispose of such wastes at WIPP.

Table 12 in Appendix A lists 6.16 m^3 of DOE/PGDP MTRU waste proposed for shipment to WIPP.

During CY 2007, 0.34 m^3 of waste was transferred from Table 7.3 to Table 12 due to it being determined to be TRU.

6.1 COMPLIANCE DATES

DOE/PGDP shall complete characterization, processing, packaging, and shipment of the waste streams listed in Table 12 to meet the WAC for WIPP by January 31, 2016. Within 10 days of the compliance date, DOE shall send written documentation to the Cabinet that the activities required by the compliance date have been completed.

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7. IMPLEMENTATION OF THE SITE TREATMENT PLAN

7.1 GENERATED WASTE

In Table 13 of Appendix A of this Annual Update to the STP, DOE/PGDP proposes to include additional MLLW generated or discovered during CY 2007 in the STP. These wastes are included in the inventory in Table 1 and are included in the appropriate treatment option in Tables 2 through 12.

Over the next five years, the following volumes of MLLW are forecast to be generated:

- CY 2008: 50 m^3
- CY 2009: 50 m^3
- CY 2010: 50 m^3
- CY 2011: 50 m^3
- CY 2012: 50 m^3

7.2 DELETED WASTE

In Table 14 of Appendix A, DOE/PGDP proposes to delete the waste treated or re-used on-site, shipped off-site, found to be compliant with land disposal restrictions, or found to be nonhazardous during CY 2007. These wastes have been removed from the totals of the inventory for Table 1 and have been removed from the treatment option Tables 2 through 12. Any MLLW both generated and treated within CY 2007 is not included in this report. Reasons for the proposed deletions per waste stream are noted in Table 14.

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APPENDIX A

DOE/PGDP WASTE TABLES

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TABLES

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Table 1. The DOE/PGDP MLLW Streams, Weights and Volumes

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Table
PA-D001	MISC. FLAMMABLE MATERIALS-Fuels	1302.34	2.10	L	D001, D018	2
PA-G001	MISC. FLAMMABLE MATERIALS-Paints	613.72	1.03	SL	D001, F001	7.2, 7.3, 8
PA-I001	MISC. FLAMMABLE MATERIALS-Adhesives Solid	36.74	0.21	SL	D001	7.2, 8
PA-J001	MISC. FLAMMABLE MATERIALS-Metal Debris	6.80	0.02	S	D001, D008	7.2
PA-L001	MISC. FLAMMABLE MATERIALS-Hetero Debris	451.33	1.06	S	D001	8
PA-N001	MISC. FLAMMABLE MATERIALS-Flammable Liquid	103.42	0.44	L	D001, D040	7.2
PA-A006	MISC. ACIDS AND BASES-Acidic	720.30	0.78	SL	D002 D010, F001, F002, F005, F007, U002, U075, U080, U211, U226, U227, U228	7.2, 8
PA-B006	MISC. ACIDS AND BASES-Basic	1064.58	1.20	SL	D002, D007	7.2
PA-J006	MISC. ACIDS AND BASES-Unknown	12.70	0.11	SL	D002	7.2
PA-M006	MISC. ACIDS AND BASES-Solid Labpacks	6.80	0.02	SL	D002	7.2
PA-B011	MISC. AQUEOUS SOLUTION CONTAIN/TOX METALS-Neutral	408.61	0.74	L	D006, D007, D008, D009, D011	7.2, 7.3
PA-W014	TRANSURANIC WASTE LIQUID	2723.40	3.04	SL	D002, D008	12
PA-A015	TRANSURANIC AND TECHNETIUM WASTE	2052.54	3.12	S	D007	12
PA-D015	TECHNETIUM WASTE-Solid/Sludge	927.15	1.16	SL	D004, D007, D009	7.1, 8
PA-C018	MISC. REACTIVE MATERIALS-Solid Labpack	10.88	0.04	S	D003	7.2
PA-A020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Sandblasting Media	545.68	0.53	S	D006 D008	7.1
PA-B020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Absorbed Org Liquids	9.07	0.02	S	D006, D030, D032	8
PA-C020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Inorganic Sludges	4477.00	5.02	SL	D004, D006, D007, D008, D009, D040	7.1, 8
PA-D020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Inorg Homog Solids	1766.45	3.85	SL	D004, D006, D007, D008, D011	7.1
PA-E020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Metal Debris	371.04	0.21	S	D006 D008 D009	7.2

Table 1. The DOE/PGDP MLLW Streams, Weights and Volumes (Continued)

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Table
PA-F020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Light Bulbs	839.15	2.55	S	D006, D007, D008, D009	7.3
PA-G020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Plastic Debris	765.67	3.23	S	D006, D007, D040	3.1
PA-H020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Paper/Cloth Debris	383.74	1.50	S	D005, D006, D007, D008, D011, D018, D040, F001	3.1, 7.2
PA-I020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Organic Debris	462.66	0.66	S	D006, D007, D008, D011, D018, D040	3.1, 7.3, 8
PA-J020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Organic Debris	1317.70	4.02	S	D004, D006, D007, D008, D009, D039, D040, F001, F002, F005, F007, U002, U075, U080, U159, U211, U226, U227, U228	7.2, 7.3
PA-W023	GOLD DISSOLVER SLUDGE	2.72	0.02	SL	D006, D008	7.1
PA-B024	MISC. CHROMATE-BEARING WASTE-Solids	1553.57	2.36	S	D007	8
PA-E024	MISC. CHROMATE-BEARING WASTE-Composite Filters	710.33	2.55	S	D004, D005, D006, D007, D008, D009, D011	7.3
PA-G024	MISC. CHROMATE-BEARING WASTE-Labpacks	191.42	0.74	S	D007	7.3, 8
PA-W025	MAGNESIUM FLUORIDE PELLETS	2755.60	3.91	S	D007	7.1, 7.3
PA-W028	CASCADE VACUUM DUST	117.94	0.21	S	D006 D007 D008	7.1
PA-G030	MISC. LEAD-BEARING WASTE-Filters	466.30	2.72	S	D008	7.3
PA-H030	MISC. LEAD-BEARING WASTE-Hetero Debris	48.08	0.21	S	D008	7.3
PA-I030	MISC. LEAD-BEARING WASTE-Lab Waste Samples	3.18	0.02	S	D008	8
PA-C033	MISC. MERCURY-BEARING WASTES-Metal Debris	81.19	0.21	S	D009	8
PA-D033	MISC. MERCURY-BEARING WASTES-Fluor Light bulbs	11.79	0.06	S	D009	7.3, 8

Table 1. The DOE/PGDP MLLW Streams, Weights and Volumes (Continued)

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Table
PA-G033	MISC. MERCURY-BEARING WASTES-Hetero Debris	1271.43	2.10	SL	D009	7.3
PA-B037	SPENT SOLVENTS- HOC Organic Liquids	106.60	0.11	L	D001, D010, D018, D040, F002, F003, F005, U228	2
PA-B038	SPENT SOLVENT SOLIDS-Absorbed Org Liquids	313.44	0.95	S	D032, F001, F002	3.1, 7.2
PA-C038	SPENT SOLVENT SOLIDS-Inorganic Sludges	344.73	0.96	S	F001, F002, U228	3.1, 7.1, 7.2
PA-E038	SPENT SOLVENT SOLIDS-HOC Organic Sludge	73.35	0.32	S	D008, F001	3.1
PA-F038	SPENT SOLVENT SOLIDS-Org Homog Solids	80.28	0.32	S	D001, F001, F002, U228	8
PA-G038	SPENT SOLVENT SOLIDS-Soils	104.78	0.32	S	D005, D006, D007, D008, D010, D018, D019, D022, D027, D028, D030, D032, D033, D034, D036, D038, D040, D042, D043, F001, F002, F005, U002, U228	3.1, 7.2
PA-H038	SPENT SOLVENT SOLIDS-Metal Debris	380.11	0.84	S	F001 F002 F005 F007 U080 U159 U226 U227	8
PA-I038	SPENT SOLVENT SOLIDS-Glass Debris	240.86	0.42	S	D006, F001, F002, F005	3.1
PA-J038	SPENT SOLVENT SOLIDS-Plastic Debris	9221.99	26.31	S	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D020, D022, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D042, D043, F001, F002, F003, F004, F005, F007, F008, U002, U052, U075, U080, U154, U159, U211, U226, U227, U228	3.1, 7.1, 7.2, 7.3, 8
PA-K038	SPENT SOLVENT SOLIDS-Wood	199.13	0.88	S	D004 D008 D010 D018 D019 D022 D027 F001 F002 F005 U075 U080 U211 U228	3.1, 8
PA-L038	SPENT SOLVENT SOLIDS-Paper/Cloth Debris	3297.02	13.49	S	D004, D005, D006, D007, D008, D009, D011, D018, D019, D028, D029, D035, D037, D039, D040, D043, F001, F002, F004, F005, F007, U002, U075, U080, U159, U211, U226, U227, U228	3.1, 8
PA-M038	SPENT SOLVENT SOLIDS-Organic Debris	2453.51	8.26	S	D007, D008, F001, F002, F005	3.1, 7.2, 8
PA-N038	SPENT SOLVENT SOLIDS-Hetero Debris	675.86	2.24	S	D006, D008, D040, F001, F002, F005, F007, U002, U075, U080, U211	3.1, 7.2, 7.3

Table 1. The DOE/PGDP MLLW Streams, Weights and Volumes (Continued)

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Table
PA-O038	SPENT SOLVENT SOLIDS-Labpacks	455.86	1.64	SL	D001, D004, D006, D007, D008, D009, D010, D018, D019, D022, D026, D027, D028, D030, D032, D033, D034, D036, D037, D040, F001, F002, F003, F005, U002, U211	7.2, 8
PA-C039	TRICHLOROETHYLENE-HOC Organic Sludges	213.64	0.86	SL	F001, F002, U228	3.1
PA-D039	TRICHLOROETHYLENE-HOC Organic Sludges	463.12	0.65	SL	D040	8
PA-W047	PENTACHLOROPHENOL	30.39	0.11	L	D037, F027	7.1
PA-A048	MISC. DISCARDED LABORATORY CHEMICALS-Acid Liquid	61.69	0.27	L	D002, D003	7.2
PA-E048	MISC. DISCARDED LABORATORY CHEMICALS-Unk Solid	15.87	0.11	S	D001, D002	8
PA-K049	MISC. TCLP WASTES-Organic Sludge	268.53	0.53	SL	D001, D005, D007, D008, D009, D040, F001, F003	7.2, 8
PA-L049	MISC. TCLP WASTES-Organic Chemicals	76.20	0.21	L	D001, U154, U211	7.2
PA-O049	MISC. TCLP WASTES-Paper/Cloth Debris	61.24	0.21	S	D011	7.2
PA-Q049	MISC. TCLP WASTES-Labpacks	430.91	1.05	SL	D002, D004, D006, D007, D008, D009, D010, D018, D019, D040, F001, F002, F003, U002, U075, U211	7.3, 8
PA-B052	WASTE OILS-Non HOC Organic Liquids	6332.5	7.89	L	D006, D007, D008, D010, D021, D027, D039, D040	2
PA-C052	WASTE OILS-Capacitors	1022.41	0.42	SL	D018	8
PA-G020 HR	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Plastic Debris–High Rad	69.40	0.21	S	D040	8

Table 1. The DOE/PGDP MLLW Streams, Weights and Volumes (Continued)

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Table
PA-L038 HR	SPENT SOLVENT SOLIDS-Paper/Cloth Debris – High Rad	52.16	0.21	S	F001	8
PA-M038 HR	SPENT SOLVENT SOLIDS-Organic Debris–High Rad	86.64	0.23	S	D040, F001, F002	8
PA-K049 HR	MISC. TCLP WASTES-Organic Sludge–High Rad	36.29	0.21	SL	D018	8
	TOTAL	**55,761.56**	**122.00**			

*L/S: Liquid (L), Solid (S) or Sludge (SL)

NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated.

Table 2. The DOE/PGDP Liquid Waste Targeted for TSCA Incinerator

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-D001	MISC. FLAMMABLE MATERIALS-Fuels	1302.34	2.10	L	D001, D018	Per section 3.1.1.4.1
PA-B037	SPENT SOLVENTS-HOC Organic Liquids	106.60	0.11	L	D001, D010, D018, D035, D040, F002, F003, F005	Per section 3.1.1.4.1
PA-B052	WASTE OILS-NonHOC Organic Liquids-Vent Duct Oil, Compressor Oil	6332.50	7.89	L	D006, D007, D008, D010, D018, D021, D027, D039, D040	Per section 3.1.1.4.1
	TOTAL	**7741.44**	**10.10**			

*L/S: Liquid (L), Solid (S) or Sludge (SL)
NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated.

Table 3.1. The DOE/PGDP Solid Waste Targeted for TSCA Incinerator

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-G020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Plastic Debris	765.67	3.23	S	D006, D007, D040	Per section 3.1.1.4.2
PA-H020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Paper/Cloth Debris	305.72	1.29	S	D005, D006, D007, D008 F001	Per section 3.1.1.4.2
PA-I020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Organic Debris	254.92	0.32	S	D006, D007, D011, D018, D040	Per section 3.1.1.4.2
PA-B038	SPENT SOLVENT SOLIDS-Absorbed Org Liquids	140.62	0.32	S	F001	Per section 3.1.1.4.2
PA-C038	SPENT SOLVENT SOLIDS-Inorganic Sludges	69.85	0.32	S	F001, F002, U228	Per section 3.1.1.4.2
PA-E038	SPENT SOLVENT SOLIDS-HOC Organic Sludge	73.35	0.32	S	D008, F001	Per section 3.1.1.4.2
PA-G038	SPENT SOLVENT SOLIDS-Soils	39.01	0.11	S	D005, D006, D007, D008, D010, D018, D019, D022, D027, D028, D030, D032, D033, D034, D036, D038, D042, D043, F001, F002, F005, U228	Per section 3.1.1.4.2
PA-H038	SPENT SOLVENT SOLIDS-Metal Debris	193.69	0.42	S	F001, F002, F005	Per section 3.1.1.4.2
PA-I038	SPENT SOLVENT SOLIDS-Glass Debris	240.86	0.42	S	D006, F001, F002, F005	Per section 3.1.1.4.2
PA-J038	SPENT SOLVENT SOLIDS-Plastic Debris	562.01	2.26	S	D008, F001, F002, F005, F007, U002, U075, U080, U159, U211, U226, U227, U228	Per section 3.1.1.4.2
PA-K038	SPENT SOLVENT SOLIDS-Wood	160.57	0.65	S	D004, D008, D010, D018, D019, D022, D027, F001	Per section 3.1.1.4.2
PA-L038	SPENT SOLVENT SOLIDS-Paper/Cloth Debris	3024.58	12.54	S	D011, D019, D039, D040, F001, F002, F004, F005, F007, U002, U075, U080, U159, U211, U226, U227, U228	Per section 3.1.1.4.2
PA-M038	SPENT SOLVENT SOLIDS-Organic Debris	1776.74	7.10	S	D007 D008 F001 F002 F005	Per section 3.1.1.4.2
PA-N038	SPENT SOLVENT SOLIDS-Hetero Debris	291.66	1.29	S	D006, D008, D040, F001, F002, F005, F007, U002, U075, U080, U211	Per section 3.1.1.4.2
PA-C039	TRICHLOROETHYLENE-HOC Organic Sludges	213.64	0.86	SL	F001, F002, U228	Per section 3.1.1.4.2
	TOTAL	**8112.89**	**31.45**			

*L/S: Liquid (L), Solid (S) or Sludge (SL)

NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated..

Table 3.2. The DOE/PDGP Solid Waste Targeted For Broad Spectrum Thermal Treatment

Waste Stream	Name	Weight (kg)	Volume (m^3)
	TOTAL	**0.00**	**0.00**

Table 4. The DOE/PGDP Waste Targeted for C-400-D On-Site Treatment

Waste Stream	Name	Weight (kg)	Volume (m^3)
	TOTAL	0.00	0.00

Table 5. The DOE/PGDP Waste Targeted for Commercial Treatment

Waste Stream	Name	Weight (kg)	Volume (m^3)
	TOTAL	0.00	0.00

Table 6. The DOE/PGDP Waste Targeted for Cyanide Treatment Facility

Waste Stream	Name	Weight (kg)	Volume (m^3)
	TOTAL	**0.00**	**0.00**

Table 7.1. The DOE/PGDP Waste Targeted for Commercial Stabilization

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-D015	TECHNETIUM WASTE-Solid/Sludge	538.87	0.74	SL	D004, D007, D009	1/31/2008
PA-A020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Sandblasting Media	545.68	0.53	S	D006, D008	1/31/2008
PA-C020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Inorganic Sludges	4468.84	5.00	SL	D004, D006, D008, D040	1/31/2008
PA-D020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Inorg Homog Solids	1766.45	3.85	SL	D004, D006, D007, D008, D011	1/31/2008
PA-W023	GOLD DISSOLVER SLUDGE	2.72	0.02	SL	D006, D008	1/31/2008
PA-W025	MAGNESIUM FLUORIDE PELLETS	1148.51	1.61	S	D007	1/31/2008
PA-W028	CASCADE VACUUM DUST	117.94	0.21	S	D006, D007, D008	1/31/2008
PA-C038	SPENT SOLVENT SOLIDS–Inorganic Sludges	117.03	0.32	S	F001	1/31/2008
PA-J038	SPENT SOLVENT SOLIDS-Plastic Debris	3889.13	12.95	S	D006, D007, D008, D018, F001, F002, F003, F005, F007, F008, U002, U052, U075, U080, U154, U159, U211, U226, U227, U228	1/31/2008
PA-W047	PENTACHLOROPHENOL	30.39	0.11	L	D037, F027	1/31/2008
	TOTAL	**12,625.56**	**25.34**			

*L/S: Liquid (L), Solid (S) or Sludge (SL)

NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated.

Table 7.2. The DOE/PGDP Waste Targeted for Commercial Stabilization

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-G001	MISC. FLAMMABLE MATERIALS-Paints	24.95	0.04	SL	D001	1/31/2008
PA-J001	MISC. FLAMMABLE MATERIALS-Metal Debris	6.80	0.02	S	D001	1/31/2008
PA-N001	MISC. FLAMMABLE MATERIALS-Flammable Liquid	103.42	0.44	L	D001, D040	1/31/2008
PA-A006	MISC. ACIDS AND BASES-Acidic	486.70	0.45	SL	D002, F001, F002, F005, F007, U002, U075, U080, U211, U226, U227, U228	1/31/2008
PA-B006	MISC. ACIDS AND BASES-Basic	1064.58	1.20	SL	D002, D007	1/31/2008
PA-J006	MISC. ACIDS AND BASES-Unknown	12.70	0.11	SL	D002	1/31/2008
PA-M006	MISC. ACIDS AND BASES-Solid Labpacks	6.80	0.02	S	D002	1/31/2008
PA-B011	MISC. AQUEOUS SOLUTION CONTAIN/TOX METALS-Neutral	114.76	0.42	L	D006, D007, D008, D009, D011	1/31/2008
PA-C018	MISC. REACTIVE MATERIALS- Solid Labpack	10.88	0.04	S	D003	1/31/2008
PA-E020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Metal Debris	371.04	0.21	S	D006, D008, D009	1/31/2008
PA-H020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Paper/Cloth Debris	78.02	0.21	S	D006, D007, D011, D018, D040	1/31/2008
PA-J020	MISC. SOLID MATTER CONTAIN/ TOXIC METALS-Heterog Debris	45.36	0.21	S	D006, D007, D009	1/31/2008
PA-B038	SPENT SOLVENT SOLIDS-Absorbed Org Liquids	172.82	0.63	L	D032, F002	1/31/2008
PA-C038	SPENT SOLVENT SOLIDS-Sludges	157.85	0.32	S	F001	1/31/2008
PA-G038	SPENT SOLVENT SOLIDS-Soils	65.77	0.21	S	D006, D007, D008, D030, D032, D040, F001, F002, F005, U002, U228	1/31/2008
PA-J038	SPENT SOLVENT SOLIDS-Plastic Debris	3500.86	5.48	S	D001, D002, D006, D007, D008, D009, D011, D018, D019, D025, D028, D029, D035, D037, D040, F001, F002, F003, F005, F007	1/31/2008
PA-M038	SPENT SOLVENT SOLIDS–Organic Debris	216.37	0.21	S	F001, F002, U228	1/31/2008
PA-N038	SPENT SOLVENT SOLIDS-Hetro Debris	316.61	0.63	S	F002	1/31/2008
PA-O038	SPENT SOLVENT SOLIDS-Labpacks	23.13	0.23	S	D007, F001	1/31/2008

Table 7.2. The DOE/PGDP Waste Targeted for Commercial Stabilization (Continued)

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-A048	MISC. DISCARDED LABORATORY CHEMICALS-Acid Liquid	61.69	0.27	L	D002, D003	1/31/2008
PA-K049	MISC. TCLP WASTES-Organic Sludge	122.47	0.21	L	D040	1/31/2008
PA-L049	MISC. TCLP WASTES-Organic Chemicals	76.20	0.21	L	D001, U154, U211	1/31/2008
PA-O049	MISC. TCLP WASTES-Paper/Cloth Debris	61.24	0.21	S	D011	1/31/2008
	TOTAL	**7101.02**	**11.98**			

*L/S: Liquid (L), Solid (S) or Sludge (SL)

NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated.

Table 7.3. The DOE/PGDP Waste Targeted for Commercial Stabilization (Macroencapsulation)

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-G001	MISC. FLAMMABLE MATERIALS-Paints	9.53	0.02	SL	D001	1/31/2008
PA-B011	MISC. AQUEOUS SOLUTION CONTAIN/TOX METALS-Neutral	293.85	0.32	L	D007	1/31/2008
PA-F020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Light Bulbs	839.15	2.55	S	D006, D007, D008, D009	1/31/2008
PA-I020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Organic Debris	33.11	0.02	S	D007, D008	1/31/2008
PA-J020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Heterog Debris	1272.34	3.81	S	D004, D006, D007, D008, D0039, D040, F001, F002, F005, F007, U002, U075, U080, U159, U211, U226, U227, U228	1/31/2008
PA-E024	MISC. CHROMATE-BEARING WASTE-Composite Filters	710.33	2.55	S	D004, D005, D006, D007, D008, D009, D010	1/31/2008
PA-G024	MISC. CHROMATE-BEARING WASTE-Labpacks	62.14	0.21	S	D007	1/31/2008
PA-W025	MAGNESIUM FLUORIDE PELLETS	1607.09	2.30	S	D007	1/31/2008
PA-G030	MISC. LEAD-BEARING WASTE-Filters	466.30	2.72	S	D008	1/31/2008
PA-H030	MISC. LEAD-BEARING WASTE-Hetero Debris	48.08	0.21	S	D008	1/31/2008
PA-D033	MISC. MERCURY-BEARING WASTES-Fluor Light Bulbs	2.72	0.02	S	D009	1/31/2008
PA-G033	MISC. MERCURY-BEARING WASTES-Hetero Debris	1271.43	2.10	SL	D009	1/31/2008
PA-J038	SPENT SOLVENT SOLIDS-Plastic Debris	769.26	3.62	S	D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D020, D022, D026, D028, D030, D032, D033, D035, D037, D039, D040, F001, F002, F003, F005, F007, F008, U002, U052, U075, U080, U154, U159, U211, U226, U227, U228	1/31/2008
PA-N038	SPENT SOLVENT SOLIDS-Hetro Debris	67.59	0.32	S	D008, F002	1/31/2008
PA-Q049	MISC. TCLP WASTES–Labpacks	18.60	0.02	S	D001, D006, D008, D009, D010, D018, D019, D040, F001, F002, F003, U002, U075, U211	1/31/2008
	TOTAL	**7471.52**	**20.79**			

*L/S: Liquid (L), Solid (S) or Sludge (SL)

NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated.

Table 8. The DOE/PGDP Waste Requiring Further Characterization/Sorting

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-G001	MISC.FLAMMABLE MATERIALS-Paints	579.24	0.97	SL	D001, F001	1/31/2008**
PA-I001	MISC.FLAMMABLE MATERIALS-Adhesives Solid	36.74	0.21	S	D001	1/31/2008**
PA-L001	MISC. FLAMMABLE MATERIALS-Hetero Debris	451.33	1.06	S	D001	1/31/2008**
PA-A006	MISC. ACIDS AND BASES-Acidic	233.60	0.33	SL	D002, D008, D010	1/31/2008**
PA-D015	TECHNETIUM WASTE-Solid/Sludge	388.28	0.42	L	D004, D007, D009	1/31/2008**
PA-B020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Absorbed Org Liquids	9.07	0.02	SL	D006, D030, D032	1/31/2008**
PA-C020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Inorganic Sludges	8.16	0.02	SL	D004, D007, D009	1/31/2008**
PA-I020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Organic Debris	174.63	0.32	S	D006, D007, D011, D018, D040	1/31/2008**
PA-B024	MISC. CHROMATE-BEARING WASTE-Solids	1553.57	2.36	S	D007	1/31/2008**
PA-G024	MISC. CHROMATE-BEARING WASTE-Labpacks	129.28	0.53	S	D007	1/31/2008**
PA-I030	MISC. LEAD-BEARING WASTE- Lab Waste Samples	3.18	0.02	S	D008	1/31/2008**
PA-C033	MISC. MERCURY-BEARING WASTES-Metal Debris	81.19	0.21	S	D009	1/31/2008**
PA-D033	MISC. MERCURY-BEARING WASTES-Fluor Light bulbs	9.07	0.04	S	D009	1/31/2008**
PA-F038	SPENT SOLVENT SOLIDS-Org Homog Solids	80.29	0.32	S	D001	1/31/2008**
PA-H038	SPENT SOLVENT SOLIDS-Metal Debris	186.43	0.42	S	F001, F002, F005, F007, U080, U159, U226, U227	1/31/2008**
PA-J038	SPENT SOLVENT SOLIDS-Plastic Debris	500.73	2.00	S	D001, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D042, D043, F001, F002, F003, F004, F005, F007, U002, U075, U080, U154, U159, U211, U226, U227, U228	1/31/2008**
PA-K038	SPENT SOLVENT SOLIDS-Wood	38.56	0.23	S	F001, F002, F005, U075, U080, U211	1/31/2008**

Table 8. The DOE/PGDP Waste Requiring Further Characterization/Sorting (Continued)

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-L038	SPENT SOLVENT SOLIDS-Paper/Cloth Debris	272.44	0.95	S	D004, D005, D006, D007, D008, D009, D018, D019, D028, D029, D035, D037, D039, D040, D043, F001, F002, F005, F007, U002, U075, U080, U159, U211, U226, U227, U228	1/31/2008**
PA-M038	SPENT SOLVENT SOLIDS-Organic Debris	460.40	0.95	S	D040, F001, F005	1/31/2008**
PA-O038	SPENT SOLVENT SOLIDS-Labpacks	432.73	1.41	SL	D001, D004, D006, D007, D008, D009, D010, D018, D019, D022, D026, D027, D028, D030, D032, D033, D034, D036, D037, D040, F001, F002, F003, F005, U002, U211	1/31/2008**
PA-D039	TRICHLOROETHYLENE -HOC Organic Sludges	463.12	0.65	SL	D040	1/31/2008**
PA-E048	MISC. DISCARDED LABORATORY CHEMICALS-Unk Solid	15.87	0.11	S	D001, D002	1/31/2008**
PA-K049	MISC. TCLP WASTES-Organic Sludge	146.06	0.32	SL	D001, D005, D007, D008, D009, F001, F003	1/31/2008**
PA-Q049	MISC. TCLP WASTES-Labpacks	412.32	1.03	SL	D002, D004, D006, D007, D008, D010, D018, D040, F001	1/31/2008**
PA-C052	WASTE OILS-Capacitors	1022.41	0.42	SL	D018	1/31/2008**
PA-G020 HR	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Plastic Debris–High Rad	69.40	0.21	S	D040	1/31/2008**
PA-L038 HR	SPENT SOLVENT SOLIDS- Paper/Cloth Debris–High Rad	52.16	0.21	S	F001	1/31/2008**
PA-M038 HR	SPENT SOLVENT SOLIDS-Organic Debris – High Rad	86.64	0.23	S	D040, F001, F002	1/31/2008**
PA-K049 HR	MISC. TCLP WASTES-Organic Sludge – High Rad	36.29	0.21	SL	D018	1/31/2008**
	TOTAL	**7933.19**	**16.18**			

*L/S: Liquid (L), Solid (S) or Sludge (SL)
** See Section 4
NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated.

Table 9. The DOE/PGDP Ash Receivers Ash Residue

Waste Stream	Name	Weight (kg)	Volume (m^3)
	TOTAL	**0.00**	**0.00**

Table 10. The DOE/PGDP Waste Targeted for Surface Radiological Characterization

Waste Stream	Name	Weight (kg)	Volume (m^3)
	TOTAL	0.00	0.00

Table 11. The DOE/PGDP Waste Previously Targeted for Potential Vitrification

Waste Stream	Name	Weight (kg)	Volume (m^3)
	TOTAL	**0.00**	**0.00**

Table 12. The DOE/PGDP MTRU

Waste Stream	Name	Weight (kg)	Volume (m^3)	L/S*	EPA Codes	Compliance Date
PA-W014	TRANSURANIC WASTE LIQUID	2723.40	3.04	SL	D002, D008	1/31/2016
PA-A015	TRANSURANIC WASTE SOLID	2052.54	3.12	S	D007	1/31/2016
	TOTAL	**4775.94**	**6.16**			

*L/S: Liquid (L), Solid (S) or Sludge (SL)

NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated.

Table 13. The DOE/PGDP Mixed/Mixed TRU Added in 2007

Waste Stream	Name	Weight (kg)	Volume (m^3)	EPA Codes
PA-D001	MISC. FLAMMABLE MATERIALS-Fuels	1302.34	2.10	D001, D018
PA-B037	SPENT SOLVENTS-HOC Organic Liquids	106.60	0.11	D001, D010, D018, D035, D040, F002, F003, F005
PA-B052	WASTE OILS-Non HOC Organic Liquids	6130.19	7.69	D006, D007, D008, D010, D018, D021, D027, D039,D040
	TOTAL	**7539.13**	**9.90**	

NOTE: Weights and volumes are taken from the database records and may vary due to actual weight verses estimated.

Table 14. The DOE/PGDP Waste Deleted from STP in 2007

Waste Stream	Name	Weight (kg)	Volume (m^3)	Reason for Deletion from Site Treatment Plan
PA-A001	MISC. FLAMMABLE MATERIALS-Aqueous	5.44	0.02	Waste was shipped to TSCAI for treatment
PA-A006	MISC. ACIDS AND BASES–Acidic	211.84	0.33	Waste was found to be nonhazardous
PA-A037	SPENT SOLVENTS-Aqueous HOC Organic Liquids	15.42	0.02	Waste was shipped to TSCAI for treatment
PA-A039	TRICHLOROETHYLENE-Aqueous HOC Organic Liquids	16,464.66	18.17	Waste was treated on-site
PA-A051	AEROSOL CANS	357.43	0.70	Waste was treated on-site
PA-B011	MISC. AQUEOUS SOLUTION CONTAIN/TOX METALS-Neutral	4756.50	8.14	Waste was shipped to TSCAI for treatment or treated on-site
PA-B051	AEROSOL CANS-containing 1,1,1 trichlor	19.96	0.11	Waste was treated on-site
PA-B052	WASTE OILS-Non HOC Organic Liquids	1799.41	1.71	Waste was shipped to TSCAI for treatment
PA-C006	DISCARDED BATTERIES–Mercury	9586.77	9.58	Waste was treated on-site; or found to be nonhazardous
PA-D015	TECHNETIUM WASTE-Solid/Sludge	226.80	0.32	Waste was found to be nonhazardous
PA-C018	MISC. REACTIVE MATERIALS-Solid Labpack	111.59	0.25	Waste was found to be nonhazardous
PA-D020	MISC. SOLID MATTER CONTAIN/TOXIC METALS–Inorganic Homog Solids	6758.45	8.17	Waste was found to be nonhazardous
PA-E048	MISC. DISCARDED LABORATORY CHEMICALS-Unk Solids	26.31	0.14	Waste was found to be nonhazardous
PA-F006	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Light Bulbs	59.87	0.32	Waste was found to be nonhazardous
PA-F038	SPENT SOLVENT SOLIDS-Org Homog Solids	6216.55	8.97	Waste was shipped to Energy*Solutions* for treatment or found to be nonhazardous
PA-E038 HR	SPENT SOLVENT SOLIDS –HOC Organic Sludge– High Rad	267.62	0.32	Waste was shipped to Energy*Solutions* or PermaFix facilities for treatment
PA-G038	SPENT SOLVENT SOLIDS-Soils	8804.32	10.01	Waste was shipped to Energy*Solutions* for treatment
PA-H020	MISC. SOLID MATTER CONTAIN/TOXIC METALS-Paper/Cloth Debris	2046.63	13.41	Waste was found to be nonhazardous
PA-I001	MISC. FLAMMABLE MATERIALS-Adhesives Solid	16.78	0.04	Waste was found to be nonhazardous

Table 14. The DOE/PGDP Waste Deleted from STP in 2007 (Continued)

Waste Stream	Name	Weight (kg)	Volume (m^3)	Reason for Deletion from Site Treatment Plan
PA-J038	SPENT SOLVENT SOLIDS-Plastic Debris	1907.01	6.53	Waste was shipped to Energy*Solutions* for treatment
PA-K038	SPENT SOLVENT SOLIDS-Wood	102.97	0.32	Waste was shipped to Energy*Solutions* for treatment
PA-L038	SPENT SOLVENT SOLIDS-Paper/Cloth Debris	3786.35	5.21	Waste was shipped to Energy*Solutions* or TSCAI for treatment
PA-L038 HR	SPENT SOLVENT SOLIDS-Paper/Cloth Debris-High Rad	61.69	0.21	Waste was shipped to Energy*Solutions* or PermaFix facilities for treatment
PA-M038	SPENT SOLVENT SOLIDS- Organic Debris	31.75	0.32	Waste was found to be nonhazardous
PA-N038 HR	SPENT SOLVENT SOLIDS-Hetero Debris-High Rad	59.87	0.21	Waste was shipped to Energy*Solutions* or PermaFix facilities for treatment
PA-O038	SPENT SOLVENT SOLIDS-Labpacks	13.61	0.11	Waste was found to be nonhazardous
PA-Q049	MISC. TCLP WASTES – Labpacks	4.54	0.02	Waste was found to be nonhazardous
PA-Q001	MISC. TCLP WASTES-Organic Debris	74.84	0.22	Material was found to be nonhazardous or was reused on-site
PA-K049 HR	MISC. TCLP WASTES-Organic Sludge-High Rad	379.66	1.27	Waste was shipped to Energy*Solutions* or PermaFix facilities for treatment or was found to be nonhazardous
	TOTAL	**64,174.64**	**95.15**	

NOTE: Weights and volumes are taken from the database records and may vary due to actual weight versus estimated.

APPENDIX B

STP ANNUAL REPORT

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B1. DESCRIPTION OF ACTIVITIES FOR STP IMPLEMENTATION

B1.1 EVALUATION OF WASTE DATA AND COMPOSITIONAL CHARACTERIZATION

This activity includes the performance of detailed evaluations of available characterization data and process knowledge. This information then is used to group similar wastes into treatment categories, identify treatment needs, establish potential options for development and demonstration, and define further characterization requirements in order to proceed with treatment studies and evaluation of treatment and disposal options.

Evaluation of existing waste data is an ongoing activity that entails review of data residing in waste tracking databases, inspection of more detailed data included in Requests for Disposal, and conduct of generator interviews, where appropriate. Data acquired is used to assign treatment groups and identify additional characterization requirements. All of Paducah Gaseous Diffusion's (PGDP's) mixed low-level waste (MLLW) has undergone preliminary review and assignment to treatment groups. The existing waste information now is being used to define the needs for obtaining the additional compositional characterization data needed to facilitate treatability studies and treatment.

Historical characterization data and process knowledge for all remaining MLLW listed in the STP Tables are being used to identify specific project lists to facilitate shipments and on-site tasks needed to complete treatment.

B1.2 TREATABILITY STUDIES AND ENGINEERING/DESIGN IMPLEMENTATION

This activity is focused on proof-of-principle evaluations of selected technologies on the bench-scale or pilot-scale with the goal of providing the technical basis for final waste treatment selection and/or engineering data for facility design. The three major areas of investigation under this activity are (1) stabilization of wastes in final waste forms to meet regulatory performance criteria; (2) thermal desorption for removal of organics and mercury, and (3) aqueous, organic, and decontamination wastes treatment evaluation. Activities related to mixed transuranic (MTRU) waste treatment are also covered.

In calendar year (CY) 2007, efforts continued to find off-site treatment capabilities. Off-site treatment facilities regularly used by U.S. Department of Energy (DOE)/PGDP have been developing additional capabilities and these new capabilities seem to offer DOE/PGDP the best opportunity for successful accomplishment of appropriate treatment and milestone completion.

B1.3 TREATMENT ACTIVITIES

DOE/PGDP performed treatment activities as described in Sections 3 and 4 of the Annual Update to which this report is attached.

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B2. PROJECTION OF DIFFICULTIES FOR STP COMPLIANCE

A challenge that DOE/PGDP faces is competition for available treatment capacity at existing facilities. For example, the Toxic Control Act (TSCA) Incinerator handles a finite amount of waste each year, and there are several DOE facilities that compete for capacity on the Tennessee Department of Environment and Conservation (TDEC)-approved burn plan. Incineration of Oak Ridge waste is given priority over acceptance and incineration of out-of-state waste by TDEC. Regulatory deadlines are given a high priority, but there is not adequate capacity to handle all the waste that DOE facilities want or need to ship at the same time. For another example, most commercial facilities have a radiological license, which limits the on-site storage of ^{235}U to 350 grams. DOE/PGDP has single containers that exceed that limit as well as containers with enough ^{235}U that the receiving facilities will not accept them at the current time because those amounts will cause them to exceed their license limits. DOE/PGDP continues to work with treatment facilities to get waste accepted and shipped.

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B3. DOE FUNDING FOR APPROVED STP ACTIVITIES

The funding for PGDP's MLLW activities for fiscal year 2008 is approximately $4,900,000. At this time, there are no funding issues likely to significantly impact any compliance dates mandated by the STP.

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B4. STP AMENDMENTS OR REVISIONS

DOE/PGDP submitted a STP modification to the Kentucky Environmental and Public Protection Cabinet (Cabinet) for review in June 2006. This modification proposed a new compliance date for shipment of Table 8 waste streams included in the treatment plan submitted with the modification. The proposed new compliance milestone of January 31, 2008, is incorporated into the STP Annual Update to which this STP Report is attached, but the proposed modification requires Cabinet approval, as an amendment or revision.

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B5. NEW WASTE STREAMS/ADDITIONAL WASTE CHARACTERIZATION INFORMATION

No new waste streams were generated or identified in 2007. All "newly generated waste" generated in 2007 was to existing identified waste streams.

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B6. MIXED WASTE MEETING LAND DISPOSAL RESTRICTIONS

Based on currently available information, there is no waste included in the STP that meets land disposal restrictions.

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